

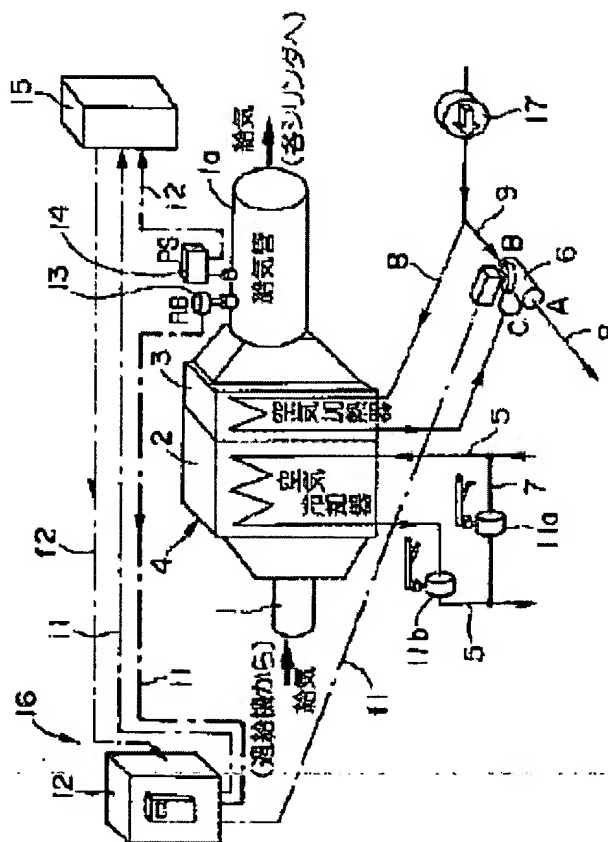
SUPPLIED-AIR TEMPERATURE CONTROL DEVICE FOR DIESEL ENGINE

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Abstract of JP2002021653

PROBLEM TO BE SOLVED: To set the temperature of overcharged air supplied to the cylinder of an engine to an appropriate supplied-air temperature corresponding to the respective load ranges for a high load and a low load of the engine, and to facilitate maintenance and examination by simplifying the structure of a device and by reducing the possibility of failure.

SOLUTION: An air cooler 2 and an air heater 3 are mounted in an air conduit (air passage) 1 for passing the supplied air from a supercharger to an air supplying pipe 1a. A supplied-air temperature regulating valve (automatic temperature regulating valve) 6 mounted in a cooling water pipe arrangement 8 of the air heater 3 is so structured that its closing amount is regulated by the operation command of a temperature regulating valve controller 12, and thereby the flow rate of hot cooling water delivered to the air heater 3 from a jacket of the engine is controlled. At that time, the temperature regulating valve controller 12 controls the closing amount of the supplied-air temperature regulating valve 6 so as to set the supplied-air temperature in the air supplying pipe to a target supplied-air temperature by selecting the target supplied-air temperature set for the respective high and low load ranges of the engine based on the detection values of a temperature detector 13 and a pressure detector 14 mounted on the air supplying pipe 1a.



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